Research Memorandum 77-6



ROTC CADETS: ATTITUDES TOWARD WOMEN IN THE ARMY

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PERSONNEL ACCESSION AND UTILIZATION TECHNICAL AREA

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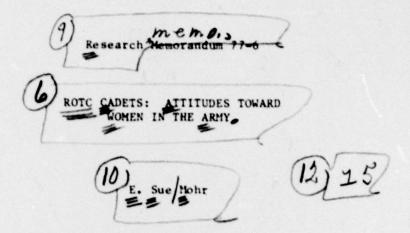
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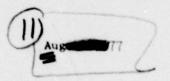
Officer Assessment and Development



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ROTC CADETS: ATTITUDES TOWARD WOMEN IN THE ARMY

In 1974, the Army Research Institute (ARI) developed an 18-item questionnaire dealing with attitudes toward women in the Army. The work was based on an Army-wide sample of male and female officer and enlisted personnel.

From the 18-item questionnaire, a 7-item short form was refined. Results indicated that women, both officers and enlisted, were more contemporary and less traditional than their respective male counterparts in their attitudes toward women in the Army.

Scores of men and women on the 7-item scale significantly differed, while on the other hand, mean scores between officer and enlisted personnel did not significantly differ.*

In 1975, as part of a larger research effort, this 7-item questionnaire was administered to male and female ROTC cadets attending Advanced Summer Camp. The present paper presents some preliminary results of this questionnaire administered at Ft. Riley, KS, one of three ROTC Advanced Camps.

METHOD

SAMPLE

A total of 865 usable questionnaires were obtained from the Ft. Riley, KS Advanced Summer Camp. Of these, 783 were from males and 82 were from females. Of the respondents, 697 were white, 152 were black and 16 were "other." For purposes of the analysis by race of cadet, the 16 "others" were dropped and only those questionnaires identified as being from white or black cadets were used. Most cadets sampled were entering their senior year in college and had contracted to take Military Science IV (MS IV) as well as being obligated to at least a two-year tour of active duty following commissioning.

Woelfel, J. C., Savell, J. M., and Collins, B. A preliminary version of a scale to measure sex-role attitudes in the Army. ARI Research Memorandum 76-3, February 1976.

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PROCEDURES

ROTC Advanced Camp is a six-week summer camp designed to simulate the military environment. Cadets are trained and tested in various areas of tactics, leadership and physical endurance. Peer ratings, in which platoon members evaluate all other members of their platoon on leadership potential, are also collected, usually during the fifth week.

Immediately following administration of peer ratings, the 7-item Women in the Army questionnaire was administered. This questionnaire was self-administered with respondents marking their response choices on IBM answer sheets.

ANALYSIS

Two basic analyses were conducted: one was based on respondent's sex and the other on respondent's race. Means and standard deviations, as well as percentage of respondents choosing a given alternative, were computed for each item. Item intercorrelations were also calculated.

All responses were reflected so that directionality was maintained, with a low score indicating a more conservative attitude toward women in the Army and a higher score reflecting a more contemporary viewpoint.

RESULTS AND DISCUSSION

MALES AND FEMALES

Table 1 presents the item means, standard deviations and t-test results for all variables. Table 2 presents a more complete and descriptive breakdown of item response patterns by presenting the percentage of each item-alternative and the results of testing for differences between these percentages.

Consistent differences in response patterns emerged with women much less traditional in their attitudes toward women in the Army than their male cohorts. That is, on every item women answered in less traditional modes than males. They felt that women commanders would get respect from males in their units, that women would be as good frontline soldiers as males, and that women make good bosses.

Women generally thought that the effectiveness of the Army would not be changed by increasing the number of qualified women in either command positions or in combat units. However, on both those items, a significantly larger percentage of women than men felt that such increases would enhance the effectiveness of the Army. Significantly more women than men felt that the Army's mission would be carried out best by sharing equally the tasks and responsibilities involved. In general, female cadets saw the inclusion of more women in the Army as not changing the Army environment or changing the overall effectiveness of the Army.

Men, on the other hand, appeared more apprehensive about the effects of additional women on the traditionally all-male environment.

Table 3 presents the intercorrelation matrix of item responses for males and females. Correlations for males were significantly different from zero at p < .05. For females, only seven correlations were not significantly different from zero; these seven are underlined.

An interesting pattern can be picked out of these correlations, the key for which is the first item ("women commanders will not get respect . . .") and the sixth one (women don't make good bosses").

The former question correlates only with the latter item. Of the insignificant correlations, all seven are associated with these two questions, which themselves correlate substantially.

These items may be reflecting a more general dimension undisclosed by male responses pertaining to acceptance of women in supervisory/ managerial positions. Women may perceive these issues as unrelated to questions of women in the Army, or women in combat.

Men do not appear to discriminate along these discrete dimensions but respond in a global manner to the stimulus word "women" and to the concept of "women in the Army."

Future users of this questionnaire should probably factor analyze male and female responses separately to investigate this possibility of sexually related response dimensions.

The picture that emerges is one of liberal or contemporary views by women and more conservative or traditional views of women by men. This suggests a potential source of conflict, in that males may view themselves as more capable of serving in the military, which represents a traditional male occupational choice. This could be especially true when combat and/or combat-related tasks are involved.

In less military settings, men seem to be more uncertain of the role women should play and seem less committed to either a positive or negative position. Examination of mean favorableness of men on item 6 ("women don't make good bosses") and item 7 (women should be included in space missions") show that some support, although not overwhelming, is given to equality for women.

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However, as this same table shows, women appear convinced that they can perform just as well as men in combat roles and in the Army in general. In non-military settings, equality also appears to be the catch-word. The women sampled in this survey seem committed and sure of their positions and rights, with few if any expressing extremely traditional role preferences.

WHITES AND BLACKS

Table 4 presents item means, standard deviations and t-test results for all variables. Table 5 presents a more complete and descriptive breakdown of item response patterns by presenting the percentage of each item alternative and the results of testing for differences between percents.

White and black cadets appear to agree on how they view the role of women in the Army. If any trends emerge from these opinions, they are in the direction of portraying blacks as less traditionally oriented than whites toward the role of women.

On the items for which differences were uncovered, significance was in the direction of blacks answering in a less traditional or conservative manner than whites.

Table 6 presents the intercorrelation matrix of item responses for blacks and whites.

All correlations for whites were significantly different from zero at p < .05. For blacks, all correlations except one, which is underlined, are significant at p < .05. Tests comparing black and white correlations for each pair of item responses revealed significant race differences on only two such pairs (p < .01).

In summary, male and female attitudes toward the role of women in the Army are more divergent than black and white attitudes. Women are more contemporary or less traditional than males, while few differences emerge between black and white cadets.

When racial differences emerge, blacks appear more contemporary than whites in their thinking about the role of women in the Army.

Male cadets responded in more conservative and traditional modes than women did. Significantly more men than women felt that female commanders would not get respect from men in their units and that they would not make as good frontline soldiers as males.

While they tended to think that women would make good bosses, they were not as unqualified in their endorsement of a woman boss as women were. The same pattern also emerged for the item dealing with whether women should be included in space missions.

That is, while males thought females should be included, males were not as enthusiastic about joint space missions as female cadets were. Nearly half the males thought that the effectiveness of the Army would not change if more qualified women were placed in command positions.

Nonetheless, men thought that if women were included in combat units, the Army's effectiveness would decline. Men felt that the Army's mission presumably one of combat, was carried out best by men with women in support roles.

The differences in attitudes toward the role of women in the Army are potential sources of conflict and confrontation between men and women in the future. More detailed examination of attitude structures is needed to probe how attitudes can be modified and/or changed to encourage assimilation of women into the Army. Further and more precise investigation into the factorial structure of this questionnaire appears necessary since this structure may differ for men and women.

Table 1. Item Means, Standard Deviations and T-test Values of of Differences Between Means for Males and Females

		(n = 783)	.es 783)	Females	Females	T-values
174	Item Description	Mean	S.D.	Mean	S.D.	Differences
4	Women commanders will not get respect	2.47	11.	3.29	.73	9.21*
2.	Women would make good front- line soldiers	1.98	.87	2.61	.93	6.19*
÷	Army's missions are best carried out by	2.29	.87	3.23	86.	9.12*
;	fied women	1.1	99.	2.26	39.	7.12*
	combat units	1.34	.59	1.92	г.	8.28*
•	Women don't make good bosses	2.81	и.	3.63	.58	9.27*
	Women included in space missions.	2.86	67.	3.48	69.	6.76*

altem responses have been reflected in the same direction with traditional responses being low, contemporary high

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Table 2. Item Responses and Percentage Differences Between Males and Females (page 1 of 2)

		Percent of Respondents	of	
=	Item and Response Alternatives	(Males) (n = 783)	(Females) (n = 82)	Z of Percent Differences
=	Women commanders will not get much respect from the men in their units.			
	a. Agree strongly.	10.6	1.2	2.87**
		43.9	42.7	-10.40**
	If women			
	a. Agree strongly.	6.3	15.9	-3.39**
	b. Agree.	17.9	43.9	-5.55**
	c. Disagree.	43.7	25.6	3.14**
	d. Disagree strongly	32.2	14.6	3.18**
3.	The Army's mission is best carried out:			
	a. mostly by men.	12.8	3.7	2.37*
	roles.	60.2	24.4	6.26**
	d. somelly by men and women.	14.2	54.9	-9.22**
	mostly by women.	0.1	0.0	0.0
;	If a greater number of qualified women were placed in command positions, the effectiveness of the Army would			
	a. increase.	11:11	36.6	-6.56**
		9.07	11.0	5.32**
		48.7	52.4	. 52

Table 2 (page 2 of 2)

	Percent of	jo :	
Item and Response Alternatives	(Males) (n = 783)	(Females) (n = 82)	Z of Percent Differences
4. If a greater number of qualified women were placed in command positions, the effectiveness of the Army would	- 1		
a. increase.	40.6	36.6	-6.56**
c. not change.	48.7	52.4	52
5. If women were assigned to combat units, the Army would			
a. become more effective.	6.0	20.7	-4.93**
c. become less effective.	72.2	29.3	7.94**
6. Women don't make very good bosses at work.			
a. Agree strongly.	6.8	1.2	2.11*
b. Agree.	20.9	1.2	4.38**
	56.8	30.5	4.50**
d. Disagree strongly.	15.5	67.1	-10.82**
7. Women should be included in space missions.			
a. Agree strongly.	18.0	54.9	-7.76**
	57.2	41.5	2.60**
c. Disagree.	17.5	0.0	4.20**
d. Disagree strongly.	7.3	3.7	1.03

* Two-tailed test p < .05

** Two-tailed test p < .01

Table 3. Intercorrelation Matrix of Item Responses by Nales (n = 783)/Females (n = 82)

	Item Description	2	3	Variable ^a	2	9	7
1.	Women commanders will not get respect	30/-07**	33/-01**	33/-01** 41/10**	29/03* 44/29	44/29	27/08
5.	Women would make good frontline soldiers		48/51	36/40	53/70* 32/19	32/19	32/33
	Army's mission is best carried out by			36/33	05/95	34/13 35/25	35/25
	qualified women				43/51	37/35	34/39
	to combat units					23/32	34/49
	Women don't make good bosses						40/38
7.	Women included in space missions						

Decimal points have been deleted

Item responses have been reflected in the same direction with traditional responses being low, contemporary high

p < .05 for male/female difference

p < .01 for male/female difference

Note. Underlined correlations are not significantly different from zero.

Table 4. Item Means, Standard Deviations and 1-test Values of Differences Between Means for Blacks and Whites

	Item Description	Whites (n = 69	Whites (n = 697) Mean S. D.	Blacks (n * 15 Mean S	Blacks (n * 152) Mean S. D.	T-values of
1:	Women c	2.52	2.52 .80	1	2.65 .84	1.80
2.	Women would make good frontline soldiers	2.01	2.01 .88		76.	2.00*
	3. Army's mission is best carried out by	2.39	.89	2.35	2.35 1.05	87.
	greater number of qualified	1.73	1.73 .66	1.88	.72	2.49*
5	women were assigned to combat units	1.37	09.	1.50	.70	2.34*
	Women don't make good bosses	2.87	.81	2.99	11.	1.67
7.	Women included in space missions.	2.91	2.91 .82 2.99 .73	2.99	.73	===

altem responses have been reflected in the same direction with traditional responses being low, contemporary high

*p < .05.

Table 5. Item Responses and Percentage Differences Between Whites and Blacks (page 1 of 2)

			And the second of the second o
Atem and Response Alternatives	Percent of Respondents Whites Blacks (n = 697) (n = 15	espondents Blacks (n = 152)	Z of Percent Difference
 Women commanders will not get much respect from the men in their units. 			
a. Agree strongly.	9.6	6.6	0.0
c. Disagree.	42.9	47.4	06
	9.6	13.8	-1.44
 If women were trained properly, they would make just as good frontline soldiers as men. 			
a. Agree strongly.	6.3	11.2	-2.20*
	20.4	20.4	0.0
c. Disagree. d. Disagree strongly	31.9	25.7	1.45
3. The Army's mission is best carried out:			
	9.6	21.7	-4.10**
b. mostly by men with some women in support roles.	59.4	43.4	3.61**
c. mostly by men with some women in combat as well as support roles.	13.5	13.2	.32
d. equally by men and women.	17.4	21.7	-1.46
	0.1	0.0	1.24
4. If a greater number of qualified women were placed in command positions, the effectiveness of the Army			
a. would increase.	38.9	20.4	-2.62**
	49.2	46.7	.45

Table 5 (page 2 of 2)

		Percent of Respondents Whites Blacks	Respondents Blacks	Z of Percent
Ite	Item and Response Alternatives	(u = 697)	(a * 152)	Difference
	If women were assigned to combat units, the Army would			
	a. become more effective.	6.5	11.8	-2.07*
	b. stay the same.	24.0	26.3	52
	c. become less effective.	9.69	8.19	1.92
•	Women don't make very good bosses at work			
	a. Agree strongly.	9.9	5.3	06
		20.1	13.8	1.71
		53.4	57.2	06
		19.9	23.7	-1.10
7.	Women should be included in space missions.			
	a. Agree strongly.	21.5	21.7	0.0
		55.8	60.5	-1.13
		16.4	13.2	93
		7.3	4.6	06

*Two-tailed test p < .05.

Two-tailed test p < .01.

Table 6. Intercorrelation Matrix of Item Responses by Whites (n = 697)/Blacks (n = 152)

	Item Description	7		Variable ³	5	٠	7
1.							
	not get respect	33/22	39/30	07/75	32/33	20/40	34/09**
7.	Women would make good frontline soldiers		52/54	38/43	56/62	35/34	36/37
-	3. Army's mission is best carried out by			42/40	51/46	41/31	40/32
;	qualified women				44/56	45/27*	41/27
٠.	to combat units					30/30	41/36
•	Women don't make good bosses						48/22**
:	7. Women included in space missions.						

Decimal points have been deleted

bitem responses have been reflected in the same direction with traditional responses being low, contemporary high

p < .05 for black/white difference

p < .01 for black/white difference

Note. Underlined correlations are not significantly different from zero.